IN THE SPECIFICATION

Please replace the paragraph beginning at page 10, line 14, with the following paragraphs:

However, the strip 32 preferable consists of ~~an~~ totally covering outer ~~continuous-~~ electrode layer 32a, ~~a~~ separating, electrically insulating ~~layer~~ continual segments 32b and an inner ~~continuous-~~electrode layer 32c. The outer ~~continuous-~~electrode layer 32a can be made of for example electrically conductive plastic or aluminum foil on strip 32. The insulating layer of continual segments 32b can be for example sintered for normal foamed plastic the cells of which comprises for example a filler. The foamed plastic preferably contains holes so that for example air passes through it. The inner ~~continuous-~~electrode layer 32c can have a similar structure as the outer ~~continuous-~~electrode layer 32a.

This provides a hollow pipe that can be used for example in such a way that as a nail passes through the pipe, a short circuit occurs between the ~~continuous-~~electrode layers as would not necessarily result if the electrode layers were not totally covering, whereby this description necessarily confirms the total covering of the electrode layers that is shown in Fig. 7, for example, when Fig. 7 is considered in the circumferentially full structure for making the pipe 15 shown only in section. Just as no one would assume from Fig. 7 that the pipe 15 shown in Fig. 7 had radial holes through it, as this would make it a leaky pipe, no one would assume radial holes through the electrodes 32a, 32c that are shown covering the inside and outside of the continuous pipe clearly implied by Fig. 7. Therefore, the pipe warns the user of a serious breakdown and the pipe can be used for example as a gas pipe inside a building.

On the other hand, a potential difference can be created between the electrode layers, whereupon as the surface of the pipe is pressed in some place for example by a stone, the change in the potential difference of the insulating layers can be detected by a voltmeter. The application of the pipe is useful for example when laying the pipe in the ground, and for example problems caused by an excessive traffic load can be taken into account in such a situation. In the same way it is possible to detect an excessive increase of the pressure inside the pipe. The alarm levels of the pipe can be determined easily by adjusting the outside ring stiffness of the pipe with respect to the inside stiffness and the hardness of the foam. On the other hand, when the pipe is used as a ventilation or a soil and waste pipe inside a building, noise of the sewer in the pipe can be detected and a counter-wave can be correspondingly produced in the outside to muffle the noise occurring in the pipe. Further, it is possible to use the outer surface to produce a sound, for example a warning signal.

The potential difference between the electrode layers can also be used as a moisture barrier, so that water molecules cannot corrode the surface of the pipe. Correspondingly, when the insulating layer becomes damp, it affects the potential difference, wherefore the pipe can be used as a sensor for locating leakage for example in district heating pipes. The strength of the pipe is also excellent for example when aluminum is used for the electrode layer. The electrode layers can naturally be used for example for electrically heating or for locating the pipe, since for example aluminum can be easily detected from the ground by means of, e.g., a metal detector. On the other hand, sound signals can also be suppled to the electrodes and the audible sound can be used to facilitate the location.

The insulating or insulation foam layer 32b of continual segments situated between the electrodes can also be modified for example with carbon black so that it is partially conductive, whereupon the compression of the insulator directly affects for example the potential difference. The application for use in sprinklers is also possible since this fast warming of the metal foil affects the electric connection between the films. Due to its great strength originating from the combination of metal and oriented plastic (again implying totally covering electrode layers 32a, 32c) and the possibilities of using alarm signals, the pipe is also applicable for offshore gas and oil pipes and for large trunk lines, for instance. It seems possible that by feeding high-frequency oscillation into a pair of electrodes, bacterial growth on the outer and/or inner surface of the pipe can be prevented.

Please replace the paragraph beginning at page 13, line 24, with:

Figure 9 shows yet another application of an extrusion apparatus according to the invention. The reference numerals in Figure 9 correspond to those in Figures 1 to 8. A plastic layer is supplied by the extrusion apparatus 19 ~~to~~ for the interior of the pipe to be ~~made of~~ totally covered by the aluminium strip ~~33~~ 32. A transparent plastic layer 35 is then supplied on the aluminium strip covered pipe with a second extrusion apparatus that is conical. The pipe ~~to be prepared~~ is pulled with a pulling device 36 in such a way that the plastic layer supplied with the extrusion apparatus sticks to the surface of the pipe a t distance from the extrusion apparatus 34 as shown. The pulling device can be rotatably connected. The pulling of the pipe ~~to be prepared~~ succeeds since, ~~since~~ due to the layer 32 made of aluminium or some other metal, the pipe stands stretching well. Axial orientaiton is thus produced in the plastic layer 35.1 The extrusion apparatus 19 provides the inside of the aluminium strip-

wrapped pipe as a plastic layer ~~comprising~~ of circumferential orientation. A pipe is thus obtained that comprises ~~an~~ a totally covering aluminium layer ~~and inside the aluminium layer there is~~ with a circumferentially ~~and/or~~ (or, possibly, axially) oriented plastic layer inside and ~~outside there is~~ an axially oriented plastic layer outside, wherefore the resulting pipe is very strong.